



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/388,989	09/02/1999	BARNEY M. COHEN	AMAT/3191.03	4766

7590

05/13/2002

PATENT COUNSEL  
APPLIED MATERIALS, INC.  
P O BOX 450-A  
SANTA CLARA, CA 95052

EXAMINER

PADGETT, MARIANNE L

ART UNIT

PAPER NUMBER

1762

15

DATE MAILED: 05/13/2002

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

08/388,989

APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
--------------------	-------------	-----------------------	---------------------

EXAMINER
----------

ART UNIT	PAPER NUMBER
----------	--------------

DATE MAILED: 15

Below is a communication from the EXAMINER in charge of this application  
COMMISSIONER OF PATENTS AND TRADEMARKS

ADVISORY ACTION

THE REPLY FILED FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check only a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ In view of the early submission of the proposed reply (within two months as set forth in MPEP § 707.07(f)), the period for reply expires on the mailing date of this Advisory Action, OR continues to run from the mailing date of the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will be entered upon the timely submission of a Notice of Appeal and Appeal Brief with requisite fees.
3. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search. (see NOTE below);
  - (b) ☐ they raise the issue of new matter. (see NOTE below);
  - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE:

4. ☒ Applicant's reply has overcome the following rejection(s):

The 112 objection to claims 29 & 30.

5. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

6. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: the treatment of dielectrics via the combination of Voelzel + Zhao et al. remains appropriate, with the teaching of Konech et al. + Subrahmanyam et al. from the IDS confirming the logic of the combination.

7. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

8. ☒ For purposes of Appeal, the status of the claim(s) is as follows (see attached written explanation, if any):

Claim(s) allowed: \_\_\_\_\_

Claim(s) objected to: \_\_\_\_\_

Claim(s) rejected: 1, 3-4, 6, 8-14, 17-33

Claim(s) withdrawn from consideration: \_\_\_\_\_

9. ☐ The proposed drawing correction filed on \_\_\_\_\_ a) ☐ has b) ☐ has not been approved by the Examiner.

10. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.

11. ☒ Other: PTO-1449, submitted 3/14/02; it is unclear how the EPO search report relates to the present case, however the X-rated reference to Subrahmanyam et al. is noted to be relevant to a two step plasma clean process using patterned dielectrics, before metalization, where the 2nd corresponds to applicant's H<sub>2</sub> plasma, but the 1st differs by using reactive gases instead of Ar. Chien et al. (US Pat.) is directed to etching, not cleaning. The EPO to Konech et al. discloses inertion (He, Ar...) followed by H<sub>2</sub> cleaning treatment, but also discloses that they come simultaneously from the same plasma. Subrahmanyam et al. + Konech et al. have teaching equivalent cumulative to Zhao et al. (682) as applied in that art rejection of papers 1 & 2

MARIANNE PADGETT  
PRIMARY EXAMINER  
GROUP 1100

TECHNOLOGY CENTER 1700  
COVER SHEET

DATE: 5/23/02

APPL. NO.

09/388,989

TO: Sharon Davis

FAX NUMBER: (713) 623-4846

PHONE NUMBER: (713) 623-4844

FROM: Marianne Padgett  
Primary Examiner, PTO

MESSAGE:

*+ selective enlargement*  
A copy of the Advisory action (paper #15), as requested due  
to poor legibility of the received 'carbon' copy.

NUMBER OF PAGES INCLUDING THIS ONE: 3

872-9310 or 872-9311  
Tech Center 1700 Fax Number 703-305-3599 or Fax Number 703-  
Tech Center 1700 Phone Number 703-308-0661

IF YOU HAVE NOT RECEIVED ALL PAGES OR HAVE OTHER  
DIFFICULTIES WITH THIS FACSIMILE PLEASE CONTACT  
THIS OFFICE BY USING THE PHONE NUMBER PRINTED ABOVE

THANK YOU